

## PUBLIC HEALTH

**British 'Stop Smoking' Program Offered**

➤ A "STOP SMOKING in nine easy stages" program has been worked out by the Central Council for Health Education in London, to help people "who really want to break the smoking habit."

Introducing the "cure" in a pamphlet, David Lynton Porter, education officer of the council, said: "We have tried to give the smoker a new and fair deal, to support him in achieving a difficult change in habits. Most people now know about the association between heavy cigarette smoking and lung cancer and other diseases."

These are the nine stages of the program:

1. Reinforce your resolution by talking to non-smokers. Give yourself a positive reason for stopping, such as health or finance.

2. Make lists of your reasons for stopping and put them by your mirror, in the bathroom, on the kitchen table, on the office desk or work bench and beside your chair for the evening TV program.

3. Travel in non-smoking railroad compartments.

4. Eat sweets or chew gum. Eating fruit may help.

5. Start your program when free from troubles. Spend the money saved the first day or week on a little luxury for yourself, family or friend.

6. Work out how much you spend on smoking a week, a year, and how much you have spent since you started. Plan what you could do with this. Put the money saved on cigarettes in a special pocket, purse, "piggy-bank" or bottle.

7. Get a friend or group of friends to join you in your non-smoking campaign. Begin with a complete break. If this is impossible, try not smoking at work, then only one after meals, then not at all.

8. Occupy your hands when you have leisure. Remember the most difficult decision to make is to stop buying cigarettes or accepting them.

9. Don't keep cigarettes in the house or offer them to smokers.

• Science News Letter, 85:116 Feb. 22, 1964

## PSYCHOLOGY

**Lung Cancer Now Linked With Pent-up Emotions**

➤ IF YOU DO not have a good way of getting rid of your pent-up emotions, you are increasing your chances of getting lung cancer, studies in Scotland indicate.

The lung-cancer death rate of those with a poor outlet for emotional discharge is more than five times as great as those with a good outlet, one study shows. The death rates are nearly three times greater than the rate of those having an intermediate outlet.

Three hundred patients examined by Dr. David M. Kissen of Southern General Hospital, Glasgow, were graded according to their ability to discharge emotion.

Fifty-five percent of the lung cancer patients scored low in emotion discharge, com-

pared to 27% of a group of 100 non-cancer patients. Only 10% of the lung cancer patients scored high in the ability to discharge emotion, compared to 26% of non-cancer patients.

"The evidence suggests that there is a significant association between personality and lung cancer," Dr. Kissen said in *Lancet*, 1:215, 1964.

Studies also suggest, he added, that the poorer the outlet for emotional discharge, the less exposure to cigarette smoke is required to induce cancer.

Referring to other studies strongly linking cigarette smoking to lung cancer, Dr. Kissen said one strong statistical association should not obscure other possible important associations in describing "what is undoubtedly a disease of multifactorial origin."

Dr. Kissen pointed out that lung cancer has been found by different investigators to be statistically associated with many other characteristics.

These include alcohol consumption, coffee consumption, eating of shellfish and crustacea, marital status, sex, age, country of birth and residence, social class, population density and occupation.

Lung cancer is also associated with air pollution, past history of respiratory disease, family factors, number of teeth lost, being gassed in World War I, the number of doctors per square mile and hairiness of the second phalanges of the fingers and toes.

• Science News Letter, 85:116 Feb. 22, 1964

## BIOCHEMISTRY

**Mental Illness Induced With Chemical in Mice**

➤ "RAGE," STUPOR, statue-like postures and other symptoms of mental illness have been induced in mice by injecting a chemical naturally found in the body. The experiments were on mice, but the symptoms were similar to those seen in human schizophrenia.

This chemical, which comes from amino acids, may cause abnormal behavior in mice because it takes unusual pathways through the body or is broken down to form harmful particles in excess of what the body can stand, Dr. Marie T. Spoerlein at the Rutgers College of Pharmacy, Newark, N. J., reported.

Mice injected with an excess of the chemical have been observed by Dr. Spoerlein and Dr. Christina VanderWende at East Orange (N.J.) Veterans Administration Hospital.

The pharmacists hope to understand the intricate body chemical processes which cause apparent schizophrenia in mice.

Brains of experimental animals under various conditions are observed in order to analyze the neurohumors—those liquids which aid or inhibit transmission of brain impulses to nerves which bring about physical actions.

Sub-cellular particles of the brain, averaging about one-300,000th of an inch in diameter, contain chemical enzymes which control many of these neurohumors, explained Dr. Spoerlein.

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**Questions**

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METEOROLOGY—What new method has been devised for making rain? p. 121.

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PSYCHOLOGY—How much can a child's IQ be increased during the first four years of life? p. 125.

SPACE—How many pounds does the Apollo spacesuit weigh? p. 115.

ZOOLOGY—What U.S. animal carries its babies in a pouch? p. 120.

**SCIENCE NEWS LETTER**

VOL. 85 FEBRUARY 22, 1964 NO. 8

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington, D. C. 20036, North 7-2255. Cable Address: SCIENSERVC.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7 1/2 cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage. Change of address: Three weeks notice is required. Please state exactly how magazine is addressed. Include postal zone number.

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